

Editorial

Special Issue “Liver Fibrosis: Mechanisms, Targets, Assessment and Treatment”

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Fibrosis is a double-edged sword. On the one hand, it can be the final state of healed inflammation as scar tissue; on the other hand, it is frequently associated with a reduction in or loss of organ function [1,2]. Moreover, it is a surrogate parameter that indicates the progression of the disease to liver cirrhosis or even hepatocellular carcinoma. This is especially true for non-alcoholic fatty liver disease, a pandemic disorder associated with Western lifestyles and diets. To influence organ fibrosis, it is important to better understand its induction, perpetuation and termination at the molecular level. The induction of liver fibrosis may be metabolic (e.g., alcohol, diet and drugs), infectious (e.g., viruses), autoimmune (e.g., primary biliary cholangitis) or due to monogenetic defects (e.g., increased iron storage) [1,2]. The molecular mechanisms leading to final-stage fibrosis are very different depending on its pathogenesis [3,4]. This Special Issue aims to provide more insight into these processes.

We, Ralf Weiskirchen and Tilman Sauerbruch (Figure 1), cordially invite you to submit original research articles, reviews, or shorter perspective articles on all aspects related to the “Liver Fibrosis: Mechanisms, Targets, Assessment and Treatment”. Expert articles describing mechanistic, functional, cellular, biochemical or general aspects of hepatic fibrogenesis are highly welcome.



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Figure 1. Editors of the Special Issue, “Liver Fibrosis: Mechanisms, Targets, Assessment and Treatment”. Ralf Weiskirchen (left); Tilman Sauerbruch (right).

Relevant topics include: fibrosis, cirrhosis, hepatocellular carcinoma, NASH, NAFLD, cytokines, chemokines, extracellular matrix, fibrotic signaling, animal models, biomarkers,

hepatic stellate cells, animal models of hepatic fibrosis, the translation of basic findings in hepatology to the human situation, portal hypertension, bile acids, beta-blockers, imaging of hepatic fibrosis, management and therapy of hepatic lesions. Based on our expertise, we will be happy to consider studies on all aspects of basic and clinical aspects of hepatic fibrosis.

Livers is an international, peer-reviewed, open access journal on liver science published online. Information about the submission process to this Special Issue, the types of desired publications, and guidelines for manuscript preparation are given at: https://www.mdpi.com/journal/livers/special_issues/742Y9BF54R.

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Short Biography of Author

Ralf Weiskirchen, Ph.D., was born on 2 February 1964 in Bergisch Gladbach (North Rhine-Westphalia, Germany). After his school education, he studied biology and obtained his PhD with distinction at the University of Cologne in Germany. Thereafter, he worked for several years as a Research Associate at the Institute of Biochemistry, University of Innsbruck, Austria. Back in Germany, he habilitated at the Technical University of Aachen and became a full Professor in 2007 at the Aachen University Hospital. Currently, he is head of the Institute of Molecular Pathobiochemistry, Experimental Gene Therapy and Clinical Chemistry (IFMPEGKC) at the RWTH University Hospital Aachen. His major research interest is the analysis of TGF- β /BMP and PDGF signaling pathways in the pathogenesis of liver disease. In particular, he has an interest in understanding the contribution of different hepatic cell subpopulations to the formation and resolution of hepatic disease. Professor Weiskirchen maintains a variety of national and international cooperations that are focused on molecular aspects of hepatic disease pathogenesis and therapy. Moreover, his work is concentrated on the identification and evaluation of novel biomarkers that are relevant to estimating the severity or outcome of hepatic diseases.

Tilman Sauerbruch, Professor Emeritus, was born on 9 July 1946 in Lauingen on the Danube. After studying Medicine at the universities of Würzburg, Montpellier, Hamburg and Heidelberg, he trained as an internist and gastroenterologist at the University of Heidelberg and at the academic teaching hospitals of Pforzheim and Munich Schwabing. Gustav Paumgartner enabled him to enter the field of hepatology at the University of Munich, where he taught and worked as an assistant and associate professor from 1984 to 1992. Between 1992 and 2012, he was a full professor of Medicine at the University of Bonn and Head of the Medical Department I, a time during which Peter Malfertheiner, Frank Lammert, Ulrich Spengler, Jürgen Rockstroh and Jonel Trebicka were essential members of the clinic's staff. From 2012 to 2014, he was a full professor and temporary head of the Department of Gastroenterology and Endocrinology at the University of Göttingen. He is a fellow of the American Gastroenterological Association. In 2018, he was Honorary President of the International Liver Congress (ILC) of the European Association for the Study of the Liver (EASL). He is an honorary member of the German Society for Internal Medicine. In 1985 he received the Körber European Science Prize; in 2014, he received the Recognition

Award of the European Association for the Study of the Liver (EASL); and in 2020, he received the Leopold Lichtwitz Medal. He tries to remain intellectually close to academic Medicine, especially hepatology.

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